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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/045,340	10/25/2001	Scott J. Robinson	P-10076	3840
27581	7590	05/20/2004	EXAMINER	
FIGUEROA, FELIX O				
ART UNIT		PAPER NUMBER		
2833				

DATE MAILED: 05/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application N .	Applicant(s)
	10/045,340	ROBINSON ET AL.
	Examiner	Art Unit
	Felix O. Figueiroa	2833

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 03 March 2004.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 40-52 and 54-77 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 40-52 and 54-77 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 25 October 2001 is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

1. Certified copies of the priority documents have been received.

2. Certified copies of the priority documents have been received in Application No. _____.

3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____

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DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the housing having an opening and defining a first environment within the housing and the electrical contacts extending from the first environment within the housing to a second environment outside the housing, as required by claim 63-66, must be shown or the features canceled from the claims. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

See further explanation in the section Response to Arguments.

Claim Objections

- Claim 77 is objected to because of the following informalities:
 - In claim 77 lines 3, "the plurality of apertures" lacks antecedent basis.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 59 and 71 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The scope of claim 59 is indefinite because there is an inconsistency within the claims. Claim 45, from which it depends, indicates that the subcombination, an apparatus, is being claimed. However, later claim 45 contains positive limitations directed toward the electrical wires, suggesting that applicant intends to claim the combination of the apparatus and the electrical wires. Applicant is required to clarify what subject matter the claims are intended to be drawn to and the language of the claim must be amended to be consistent with this intent.

The scope of claim 71 is indefinite because there is an inconsistency within the claims. Claim 60, from which it depends, indicates that the subcombination, an apparatus, is being claimed. However, later claim 71 contains positive limitations directed toward an implantable medical device, suggesting that applicant intends to claim the combination of the apparatus and the implantable medical device. Applicant is required to clarify what subject matter the claims are intended to be drawn to and the language of the claim must be amended to be consistent with this intent.

See further explanation in the section Response to Arguments.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 40-44 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirai et al. (US 6,059,601).

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Hirai discloses an electrical connector comprising: a molded housing (8) of insulating material / plastic, having a plurality of contact pad-receiving interlocking structures; a stamped insert (Fig.9) having a plurality of contacts (3) secured to the molded housing; and a removable tab (11) attached to the stamped insert and removable by severing along a line of attachment / scribed line (12); and means adapted for permanently attaching (3b) an electrical wire to each contact. It is noted that the recitations in the preamble has been given little patentable weight because the merely recite the use of the structure, and the body of the claim does not depend on the preamble for completeness but, instead, structural limitations are able to stand alone.

See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Regarding claim 41, Hirai discloses the means for attaching comprising an aperture (at 3b).

Regarding claim 42, Hirai discloses the insulating material comprising a resin-based material (col.3, lines 42-43).

Regarding claim 43, Hirai shows the electrical connector comprising a thin, substantially flat connector member.

Claims 45-48, 50-52, 54, 56 and 57 are rejected under 35 U.S.C. 102(b) as being anticipated by Hirai et al. (US 6,059,601).

Hirai discloses an apparatus for connecting components comprising: at least one electrical connector (3) comprising a tab section (11) and a plurality of spaced apart conducting bonding pads (not labeled in Fig.9); a housing (8) at least partially enclosing

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the bonding pads on electrical connectors; wherein the housing is molded into sealing engagement with the electrical connector; wherein the tab section is capable (by 12) of removal from the bonding pads on the electrical connectors. It is noted that the recitations in the preamble has been given little patentable weight because the merely recite the use of the structure, and the body of the claim does not depend on the preamble for completeness but, instead, structural limitations are able to stand alone.

See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Regarding claim 46, Hirai discloses the apparatus being capable of providing electrical connection between a plurality of electrical components. Please note that it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re Hutchison*, 69 USPQ 138.

Regarding claims 47 and 48, Hirai discloses the at least one electrical connector comprising a series of electrical connectors (3) temporarily attached by the tab section; and the series of electrical connectors adapted to be manually segmented into discrete components after molding of the housing around the connector and removal of the tab section.

Regarding claims 50 and 51, Hirai discloses the housing comprising an insulating material / moldable plastic.

Regarding claim 54, Hirai discloses the at least one electrical connector conducts electrical signals between a plurality of contact surfaces on each electrical connector,

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and wherein the housing provides isolation between the electrical connectors and the conducting bonding pads.

Regarding claims 56 and 57, Hirai discloses the at least one electrical connector comprising an electrically conductive metallic material / base metal.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 49, 58-65, 67-69, 70-71; 72-75 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai.

Regarding claims 49 and 59, Hirai discloses substantially the claimed invention except for the apparatus being a component of an implantable medical device. However, it would have been obvious to an ordinary worker in the art at the time the invention was made to use the structure of Hirai as a component of different electrical devices, such as an implantable medical device, to reliably complete an electrical connection within the electrical device.

Regarding claim 58, Hirai discloses substantially the claimed invention except for the specific material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the contact / connector comprising gold or nickel as the preferred material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended

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use as a matter of obvious design preference, and in order to ensure good electrical connection and continuity. *In re Leshin*, 125 USPQ 416.

Regarding claim 60, Hirai discloses a feed-through arrangement comprising: a plurality of electrical contacts (3) for conducting electrical signals; a molded housing (8) comprising an electrically insulating material, the housing enclosing a portion of the plurality of electrical contacts, the housing being in sealing engagement therewith; the housing comprising a plurality of apertures (between members 13) capable of receiving electrical wires. Additionally, see previous discussion on claims 49 and 59.

Regarding claims 63-65, Hirai also discloses the arrangement comprising a housing (see Fig.5) having an opening and defining a first internal environment within the housing and the electrical contacts extending from the first environment within the housing to a second environment outside the housing.

Regarding claim 69, see discussion on claim 58.

Regarding claim 72, Hirai discloses the claimed invention as discussed above regarding claims 60, 49 and 59.

Claims 55 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai in view of Damaschke et al. (US 6,351,884).

Hirai discloses substantially the claimed invention except for the use of clamping connection instead of welded connection. Damaschke shows that a welded connection is an equivalent structure known in the art for a connection between a connector and an electrical wire. Therefore, because these two connection methods were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would

have found it obvious the substitution of a clamping connection for a welded connection to securely maintain electrical continuity.

Claim 76 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai in view of Hawkins et al. (US 6,029,089).

Hirai discloses substantially the claimed invention except for the use of glass on the housing. Hawkins teaches the use of glass on a housing to provide visual confirmation of the electrical connection. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the housing comprising glass, as taught by Hawkins, to provide visual confirmation of the electrical connection.

Claims 60-69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Urushibata et al (US 5,057,650).

Urushibata discloses a feed-through arrangement comprising: a plurality of electrical contacts (13) for conducting electrical signals; a molded housing (12) comprising an electrically insulating material, the housing enclosing a portion of the plurality of electrical contacts, the housing being in sealing engagement therewith; the housing comprising a plurality of apertures (17) capable of receiving electrical wires (50). Urushibata discloses substantially the claimed invention except for the apparatus being a component of an implantable medical device. However, it would have been obvious to an ordinary worker in the art at the time the invention was made to use the structure of Urushibata as a component of different electrical devices, such as an

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implantable medical device, to complete an electrical connection within the electrical device.

Regarding claim 62, Urushibata discloses the housing comprising a dielectric material.

Regarding claims 63-67, Urushibata also discloses the arrangement comprising a housing having an opening (from which 13 extend) and defining a first environment within the housing and the electrical contacts extending from the first environment within the housing to a second environment outside the housing; the plurality of apertures extending from the first environment within the housing to the second environment outside the housing.

Regarding claim 69, Hirai discloses substantially the claimed invention except for the specific material. It would have been obvious to one having ordinary skill in the art at the time the invention was made to form the contact / connector comprising gold or nickel as the preferred material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design preference, and in order to ensure good electrical connection and continuity. *In re Leshin*, 125 USPQ 416.

Response to Arguments

Applicant's arguments filed March 3, 2004 have been fully considered but they are not persuasive.

In response to Applicant's arguments regarding the drawing objections, it is noted that 37 CFR 1.83(a) states that the drawings must show every feature of the invention

specified in the claims. Please note that claimed features should be explicitly shown by the drawings, e.g. by label them. The use of a new reference numeral is suggested.

In response to Applicant's arguments regarding the rejection under 35 U.S.C. 112, 2nd paragraph, please noted that the preambles of claims 45 and 60 suggest that the features recited (intended to be limited) by the dependent claims 59 and 71 are not part of the initially claimed "apparatus" or "feedthrough arrangement". While the open-ended transitional phrase "comprising" allows the addition of limitations to the claimed device, limitations toward devices that are not positively claimed make the claims indefinite.

In response to Applicant's arguments (regarding claims 40 and 45) that Hirai does not represent analogous art applicable to the present claims, it is noted that the issue of "analogous art" may only be applicable when an obviousness type rejection is presented. Analogy issues may be considered when two or more references or teachings are being combined. Since independent claims 40 and 45 are rejected under 35 U.S.C. 102(b) and the claimed limitations are all disclosed by the reference, the issue of analogy is irrelevant.

Applicant argues that "Independent claims 40 and 45 both recite limitations not found expressly or inherently in Hirai". However, since no specific limitations have been pointed out, this assertion is moot.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention

where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to an ordinary worker in the art at the time the invention was made to use the structure of Hirai as a component of different electrical devices, such as an implantable medical device, to reliably complete an electrical connection within the electrical device. It is noted that one skilled in the art would not be prevented from the use of known and advantageous structures within different environments, if the structures are capable of providing the desired result.

In response to Applicant's arguments regarding claim 49, it is first noted that the previous Office action clearly stated that "Claims 49, 58-65, 67-69, 70-71; 72-75 and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirai." It is further noted that the paragraph following this statement addresses the limitation of claim 49. Nonetheless, it is noted that applicant's belief that "no rationale was included" is not sufficient to conclude that the claim is allowable. It is still applicant's burden to point out how the language of the claim(s) patentably distinguishes them from the references. See 37 CFR 1.111(b) & (c).

Additionally, while most claims are explicitly addressed in order to assist the Applicant's understanding of the rejection, such explanation is not to be restricted/bounded to any specific claim when the explanation is relevant to limitations in other claims. It is still necessary that Applicant clearly point out the patentable novelty which

he or she thinks the claims present in view of the state of the art disclosed by the references cited. Specifically, Applicant needs to point out how the language of the claims patentably distinguishes them from the references. In this case, it has not been shown how the claimed language / amendments avoid the applied reference(s).

In response to Applicant's suggestion that "the Examiner used the term 'substantially' because certain claim limitations contained in the pending claims are not found, suggested, taught or depicted in Hirai", it is noted that the use of the term "substantially" merely concurs with the subject matter further addressed, i.e. Hirai lacks "the apparatus being a component of an implantable medical device".

In response to Applicant's arguments regarding claim 60, it is noted that the recitations in the preamble carry little patentable weight because they merely recite the use of the structure, and the body of the claim does not depend on the preamble for completeness but, instead, structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

In response to Applicant's arguments that "the Examiner has, in general, misconstrued 'the housing' element" because "[t]he housing described and depicted in

the instant application is a discrete set of electrically insulating members that mechanically interlock to retain each of a plurality of discrete spaced-apart electrically conducting bonding pads", it is noted that Hirai disclose the conducting bonding pads (near 3 in Fig.9) mechanically interlocking with the housing. Furthermore, it is noted that the claims do not restrict the housing to be a single element.

In response to Applicant's arguments regarding the combination of Hirai and Hawkins, it is noted that while another material has been added to the group of materials, a glass material is still part of the list and the broader claims is still met by Hawkins.

In response to applicant's argument that there is no suggestion to combine the references (Hirai and Damaschke), the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it is first noted that a welded union is not restrict to any specific environment, e.g. an IMD or a PCB. Additionally, one skilled in the art would have been apt to select any specific attachment method base on environmental requirements / preference in order to maintain / ensure electrical continuity.

In response to Applicant's arguments that Urushibata does not disclose a housing being disposed in sealing arrangement with said portion of the plurality of

"electrical contacts" and "further comprising a plurality of apertures for permanently receiving electrical wires for connection with the plurality of electrical contacts", please note that Urushibata disclose a sealing arrangement (abstract, lines 9-11) and a plurality of apertures (17).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix O. Figueroa whose telephone number is (571) 272-2003. The examiner can normally be reached on Mon.-Fri., 10:00am-6:00pm.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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PRIMARY EXAMINER